

D&D Subgroup Highlights November 12, 1997

This meeting was held in the EESB Stampede Room.

X-Change '97 Status

Jim Goodenough distributed copies of the interim program for X-Change '97. Wayne Green went over some concerns about presenters from Hanford and who would be allowed to go as part of the eight individuals on Hanford baseline funding. Jim Jarrett and Sue Garrett reviewed who was going from PNNL and stated that Mark Hanson is still working on the PNNL list of attendees. Jim Goodenough will check with everyone involved to get a final list together as to who is attending from Hanford.

FY98 Science Needs

Sue Garrett gave the D&D Science Needs presentation at the last STCG Management Council meeting. Based on feedback from the meeting, two of the needs were dropped because they were seen as technology rather than science needs: Non-destructive Characterization Mapping and NaK Passivation Chemistry. Sue also rewrote the other five science needs to remove Hanford jargon and to beef up the description of the needs. The need dealing with the Cs capsules was retitled "Cs Source Identification" and the science need description was also rewritten. In addition, at the end of each need description, a new section was added that linked the science need to a technology need. This was added to help the reader better understand the baseline insertion timing for the needs' solution.

D&D Focus Area Program Review Update

Jim Goodenough and Jim Jarrett participated in this review in Morgantown. Jim Jarrett was one of the eleven panel members. Information on the C-Reactor Large Scale Demonstration was presented to the review panel. Jim Goodenough noted that we need to work on how we present information on the C-Reactor to the public and others. At this meeting Paul Hart announced that Rocky Flats and ORNL both withdrew from the large-scale demonstrations they were slated to do and that the DDFA was looking for new large-scale demonstrations now. Paul Hart also announced that the DDFA will provide some funding for the Hanford Canyon Initiative. This will not be as a large-scale demonstration, though. In addition to the DDFA, the Robotics and Characterization Cross Cutting programs will also be involved in the Canyon work. BHI and DOE-RL are putting together a business plan for this work this month. This needs to be an integrated project across EM-40, -30, and -50. EM-30 and -40 may not have to contribute money, but be asked to participate in the project with personnel time. Jim Goodenough stated that up to \$2 million of FY98 money from EM-50 was available for this effort. There will be a meeting at the X-Change '97 Symposium to present this plan to the DDFA.

Wayne Green and Sue Garrett stated that the Robotics Cross-Cutting Focus Area gave PNNL \$450K to develop a clunk tester for the WESF Cs/Sr capsules. Sharon Bailey, PNNL, is putting a proposal together for the \$450K worth of work that the Robotics program wants done. Sharon will run the proposal through this subgroup.

Jim Jarrett was the only lab person on the review panel, as the others were DOE and Contractor personnel. The panel met for 3½ days and heard presentations from a number of people. They collected comments and impressions after the presentations and examined the relevance of the work being done, how it was being performed, the linkage to other EM organizations; as well as examining cost/benefit and risk reduction issues. Jim shared some of his and the panel's impressions with the Subgroup:

- More than 80% of the cost for D&D will be after 2006;
- the DDFA should be continued after 2003 when it is scheduled to be shut down;
- the large-scale demonstration approach has been effective;
- the DDFA should focus on technologies that further reduce risk and costs;
- there need to be ways to incentivise the risk to the contractors to use, deploy and demonstrate new technologies;
- there could be risk to the contractor's schedule, funding, quality, and safety;
- Paul Hart and the DDFA want to use private industry developed technologies more;
- DOE needs to nurture the maturization of technologies all the way through the process to deployment;
- need to keep track of technologies being developed so as not to reinvent the wheel;
- need to do a Return on Investment (ROI) calculation on all projects to justify their going forward;
- need better metrics to measure improvements in risk, cost, schedule, etc.;
- need to have a cost/benefit analysis done earlier in the GATE process (at Stage 2); and
- the prioritization process for DDFA needs to be clearer and applied more uniformly, with guidelines.

Information on the DOE GATE process will be sent to all subgroup members. Wayne Green discussed an invention that he has patent information on that is a headgear mounted indicator for ionizing radiation. The patent information will be sent out to all subgroup members. Wayne will attempt to obtain the headgear to test at Hanford and will keep the subgroup informed. Sue Garrett stated that she is on the review panel that is looking at science proposals for EMSP from PNNL.

FY97 Annual Report/FY98 Work Plan

Copies of the FY97 Annual Report for this subgroup were distributed and reviewed by the subgroup. One addition was to mention the C-Reactor presentation at last summer's TRICIPE Conference. The annual report and work plan will be given out at

the next STCG Management Council meeting. Jim Goodenough will be on a panel that discusses these at the meeting. Jim said that the subgroup needed to focus on identifying commitments for FY98. One idea that was not accepted was to break into smaller subcommittees to work on various D&D areas. Jim also mentioned that a D&D Master's Degree program may be started in the Tri-Cities soon.

In FY98 the TDI proposals will be started in January, the technology needs are to be done by June in draft form, work on the canyon initiative and robotics work will be started, the C-Reactor large-scale demonstration will wrap-up, the subgroup should establish contacts with the DDFA, Robotics, Characterization and the other cross-cutting programs also, and we should work with other sites on TDI proposals. As part of the work plan, our participation in the just completed D&D Decision Makers Forum should be noted as well as in X-Change '97 and Spectrum. The subgroup may work with HAMMER on their D&D Initiative also. One idea was to evaluate what is being done now on waste disposal at ERDF and compare the life-cycle costs of this versus cleaning to free release levels.

D&D Subgroup Attendees

Gary Ballew	PREC	946-0611	
Sue Garrett	PNNL	372-4266	
Wayne Green	FDH	372-6533	
Jim Jarrett	PNNL	372-4347	
Bob Julian	Ecology	736-5702	
David Langstaff	US DOE	376-5580	
Gerry McCormick	BWHC	372-8173	
Paul Rudnick	PREC	(206)224-9954	
Steve Weakley	PNNL	372-4275	